

CLAIMS

1. A device (100) for automatically detecting various characteristics of an ophthalmic lens (10), the device comprising a support (110) adapted to receive said lens
5 and being characterized in that said support (110) is displaceable in translation along two mutually perpendicular axes, and including means for forming a positioning image on first acquisition and analysis means (130).
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2. A device (100) according to claim 1, characterized in that on either side of said support (110) it includes firstly first illumination means (120) for illuminating the ophthalmic lens (10) installed on said support (110),
15 and secondly said first acquisition and analysis means (130), and in that said support includes at least one passive pointer (113, 113') which, when illuminated by said first illumination means (120) forms, in shadow, a positioning image on said first acquisition and analysis
20 means (130).
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3. A device (100) according to claim 1, characterized in that said support includes an active pointer that emits a signal received by said first acquisition and analysis means (130).
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4. A device (100) according to any one of claims 1 to 3, characterized in that each pointer presents a polygonal contour line.
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5. A device (100) according to any one of claims 1 to 3, characterized in that each pointer presents a circular contour line.
6. A device (100) according to any one of claims 1 to 3, characterized in that each pointer presents a cruciform contour line.

7. A device (100) according to any one of claims 4 to 6, characterized in that the contour line is an outer contour line.

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8. A device (100) according to any one of claims 4 to 6, characterized in that the contour line is an inner contour line.

10 9. A device (100) according to claim 2, characterized in that said support (110) is movable between a plurality of positions for measuring characteristics of said lens, the device including a plurality of passive pointers (113, 113') arranged in such a manner that at least one of the
15 passive pointers (113, 113') is illuminated by said first illumination means (120) and forms, in shadow, a positioning image on said first acquisition and analysis means (130) regardless of the measurement position taken up by said support (110).

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10. A device (100) according to any preceding claim, characterized in that said support (110) is displaceable along a third axis perpendicular to the first two displacement axes.

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11. A device (100) according to any preceding claim, characterized in that said support (110) includes means for receiving a spectacle frame in which said lens is fitted.

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12. A device (100) according to any preceding claim, characterized in that said support (110) includes a plurality of elements (111, 112, 114, 115) suitable for taking up relative positions that are different relative
35 to one another.

13. A device (100) according to claim 12, characterized
in that said support (110) comprises a nose (111) and a
clamping jaw (112) suitable for clamping a spectacle
frame, said clamping jaw (112) being displaceable in
5 translation relative to said nose (111) while being
continuously urged towards an initial position relative
thereto by resilient return means.

14. A device (100) according to claim 13, characterized
10 in that said nose (111) is mounted on a slider portion
(114) suitable for sliding in a groove (115A) of a strip
(115), said nose (111) attached to said slider portion
(114) being suitable for being displaced in translation
relative to said strip (115) while being continuously
15 urged towards an initial position relative thereto by
resilient return means.

15. A device (100) according to claim 14, characterized
in that said nose (111) is pivotally mounted on said
20 slider portion (114).

16. A method of automatically detecting various
characteristics of an ophthalmic lens (10) provided with
markings, using the device (100) according to any one of
25 claims 1 to 12, the method being characterized in that it
comprises the following steps:

- with the ophthalmic lens (10) placed on said support (110), displacing the support (110) to position said lens in a measurement position;
- 30 · using said first illumination means to illuminate said lens and at least one passive pointer of said support (110), the pattern filter being activated;
- using said acquisition and analysis means to pick up a digital file representative of the image of the lens;
- 35 · deactivating the pattern filter;

- using said acquisition and analysis means to pick up a digital file representative of the positioning image formed, in shadow, by said passive pointer;
- processing the digital files as picked up; and

5 · deducing therefrom the position of said support and the positions of the markings of the lens in a stationary frame of reference.